

Recovery Plan Action Status

Plan Name: Tennessee Purple Coneflower

Plan Status: Final Revision 1

Plan Date: 14-Nov-89

Lead Agency: USFWS

Lead Office: Tennessee Ecological Services Field Office

(fig. 1)
(528-6481)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Tennessee purple coneflower (Echinacea tennesseensis)	2	1	Continue systematic searches for new colonies	Complete	Prior to FY 1995	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Research: Population Surveys	Internal Field Assistance	Initiated in FY 1988
Tennessee purple coneflower (Echinacea tennesseensis)	2	10	Provide water, if necessary, to improve initial survivorship	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Reintroduction	Internal Field Assistance	
Tennessee purple coneflower (Echinacea tennesseensis)	1	11	Secure as in Task 2	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4, Tennessee Nature Conservancy	Acquisition: Management Agreement	Species Expert	Undetermined
Tennessee purple coneflower (Echinacea tennesseensis)	2	12	Obtain baseline data	Complete	Prior to FY 1995	Prior to FY 1995	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Research: Population Surveys	Species Expert	Initiated in FY 1988
Tennessee purple coneflower (Echinacea tennesseensis)	2	13	Analyze water relations and budget	Not Started			Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Work type not yet selected	Labor type not yet selected	
Tennessee purple coneflower (Echinacea tennesseensis)	2	14	Study light relations	Not Started			Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Work type not yet selected	Labor type not yet selected	

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Tennessee purple coneflower (Echinacea tennesseensis)	2	15	Examine effects of allelopathy and/or competition	Partially Complete	Prior to FY 1995	Prior to FY 1995	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Work type not yet selected	Labor type not yet selected	initiated in FY 1989
Tennessee purple coneflower (Echinacea tennesseensis)	2	16	Evaluate cover and viability	Not Started			Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Work type not yet selected	Labor type not yet selected	
Tennessee purple coneflower (Echinacea tennesseensis)	2	17	Monitor for evidence of disturbance, poaching, disease, etc	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Law Enforcement Division, Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Predator and Competitor Control	Species Expert	
Tennessee purple coneflower (Echinacea tennesseensis)	1	18	Conduct experimental burns	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Research: Management Techniques	Species Expert	
Tennessee purple coneflower (Echinacea tennesseensis)	1	19	Test grazing as a management tool	Partially Complete	FY 2000 - FY 2004		Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Work type not yet selected	Labor type not yet selected	Costs may be reduced if combined with Task 5.4.1
Tennessee purple coneflower (Echinacea tennesseensis)	1	2	obtain long-term protection of privately owned colonies	Complete	FY 2000 - FY 2004	FY 2009	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4, Tennessee Nature Conservancy	Acquisition: Management Agreement	Species Expert	Undetermined
Tennessee purple coneflower (Echinacea tennesseensis)	1	20	Test removal of competing taxa by manual or mechanical means	Ongoing Not Current	FY 1995 - FY 1999	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Research: Management Techniques	Species Expert	Costs may be reduced if combined with Tasks 5.4.1 and 5.4.2

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Tennessee purple coneflower (Echinacea tennesseensis)	1	21	Prepare management recommendations and plans(s)	Ongoing Current	Prior to FY 1995		Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Planning	Species Expert	
Tennessee purple coneflower (Echinacea tennesseensis)	3	22	Make interpretive displays and gardens	Not Started			Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4, Tennessee Nature Conservancy	Other: Information and Education	Internal Field Assistance	Undetermined. See page 38 for task accomplishments
Tennessee purple coneflower (Echinacea tennesseensis)	3	23	Write articles for magazines, newsletters, and newspapers	Ongoing Current	Prior to FY 1995		Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4, Tennessee Nature Conservancy, Private Researcher	Other: Information and Education	Internal Field Assistance	Undetermined. See page 38 for task accomplishments
Tennessee purple coneflower (Echinacea tennesseensis)	1	3	Maintain protective zoning of State-owned colonies	Ongoing Current	Prior to FY 1995		Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Land Use	Species Expert	Completed
Tennessee purple coneflower (Echinacea tennesseensis)	1	4	Restrict access to colonies	Complete	Prior to FY 1995	FY 2009	National Park Service, Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4, Tennessee Nature Conservancy	Management: Other	Species Expert	Will be initiated in FY 1989
Tennessee purple coneflower (Echinacea tennesseensis)	2	5	Maintain colonies representing populations 1 through 5 in cultivation	Discontinued	FY 1995 - FY 1999	FY 2008	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Propagation	Species Expert	Due to recovered status, Missouri Botanical Garden maintains only seed accessions for this species.

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Tennessee purple coneflower (Echinacea tennesseensis)	2	6	Maintain viable seeds from each natural colony	Ongoing Current	FY 1995 - FY 1999		U.S. Forest Service, Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Propagation	Species Expert	
Tennessee purple coneflower (Echinacea tennesseensis)	3	7	Move excess seeds available to greenhouse owners willing to assist in the recovery effort	Discontinued	FY 1995 - FY 1999	FY 2008	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Propagation	Species Expert	Seed accessions are only maintained at Missouri Botanical Garden.
Tennessee purple coneflower (Echinacea tennesseensis)	2	8	Identify suitable sites	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Reintroduction	Species Expert	
Tennessee purple coneflower (Echinacea tennesseensis)	2	9	Plant seeds or young plants	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	Tennessee Department of Conservation , Fish and Wildlife Enhancement, USFWS Regional Office 4	Management: Reintroduction	Species Expert	